IN THE DRAWINGS

Please substitute the attached replacement Figures 2A-2C and 4A-4B for the corresponding figures of record.

REMARKS

The attached Figs. 2A-2C and 4A-4B are replacement figures for properly identifying the SEQ ID NO's as requested by the Examiner under the heading "SEQUENCE COMPLIANCE" on page 2 of the Office Communication dated July 21, 2009.

In particular, Figs. 2B and 4B show the SEQ ID NO's encoding the DP 7-JH4 and DPH 12-JK4. Hopefully, this now satisfies the sequence disclosure requirements for nucleotide and/or amino acid sequence set forth in 37 CFR 1.821 – 1.825. Applicant submitted with the Amendment filed on December 22, 2009 a computer readable sequence in addition to a certificate of deposit for the hybridnoma cell lines KKCTC1019BP and KCPC10199BP.

Applicant would like to add the following comments regarding the decrease in HAMA which was clearly unexpected as is evident from Example 9.

HAMA (Human Anti-Mouse Antibody) response is essentially an allergic reaction to the humanized antibodies, and occurs when injected humanized antibodies are recognized as foreign material. The HAMA response can also decrease the effectiveness of a treatment. Accordingly, a technical feature for minimizing HAMA response as well as maximizing antigen binding affinity is very important to exploit a humanized antibody.

In accordance with the method of the present invention (SDR grafting), amino acid sequences derived from non-self origin are minimized because step (a) must be carried out first followed by step (b). This sequence, as set forth in claim 2, is critical to the subject invention. In contrast, a humanized antibody using Leong's method includes a considerable number of mouse derived sequences as a result of grafting whole CDR first, which is conventional. That is, the structure of humanized antibody is totally different between the present invention and Leong's method due to the change in the order of steps (a) and (b) from the conventional order whcih produces unexpected results.

Humanized antibodies produced by the method of present invention are able to effectively reduce HAMA response. More significantly, the number of the peptide sequence in the humanized antibody of the present invention which binds to the MHC class II will be fewer in Leong than that of a humanized antibody produced by a conventional method such as Example 9 in the present specification. As is shown in tables 7 and 8 of the present invention, there is a reduction of (i) 48% in heavy chain variable region, and (ii) a reduction of 63% in light chain variable region, compared to a conventional humanized antibody.

Accordingly, the method taught in the cited reference Leong clearly does not make obvious the step of grafting SDR not first, but only after following the replacement of each amino acid residue in the complimentary region CDR, as set forth in paragraph (a) of claim 1. Moreover, the effect of decreasing the HAMA

response in the present invention cannot be achieved using the conventional method of Leong.

For all of the above reasons, claims 2, 3, 4, 5, 6, 7, 8, 9 and 10 are now believed to be in condition for allowance.

Reconsideration and allowance of claims 2-10 is respectfully solicited.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION

I hereby certify that this Supplemental Amendment w/attachments is being submitted to the U.S. Patent Office via EFS- Web to the Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450 on February 26, 2010.

By _____
Audrey de Souza